PTO/SB/08A (07-05)

Approved for use through 07/31/2008. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

ubstitute for form 1449A/PTO

## **INFORMATION DISCLOSURE** STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet of

Complete if Known				
Application Number	09/819,126			
Filing Date	March 27, 2001			
First Named Inventor	Errico			
Art Unit	2623			
Examiner Name	TBD			
Attomey Docket Number	7146.0107			

		·	U.S. PATENT E	OCUMENTS	
Examiner	Cite	Document Number	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevan
Initials *	No.1	Number - Kind Code <sup>2</sup> (if known)	MM-DD-YYYY	Cited Document	Passages or Relevant Figures Appear
JS/		US- D435,561	12-26-2000	Pettigrew et al.	
/JS/		US- Re36,801	08-01-2000	Logan et al.	
/JS/		US- 4,183,056	01-08-1980	Evans et al.	
/JS/		US- 4,253,108	02-24-1981	Engel	
/JS/		US- 4,298,884	11-03-1981	Reneau	
ZJS	/	US- 4,520,404	05-28-1985	Von Kohom	
JS/		US- 4,729,044	03-01-1988	Kiesel	
/JS		US- 4,937,685	06-26-1990	Barker et al.	
/JS/		US- 5,027,400	06-25-1991	Bajl et at.	· · · · · · · · · · · · · · · · · · ·
/JS/		US- 5,101,364	03-31-1992	Davenport et al.	
JS/		US- 5,109,482	04-28-1992	Bohrman	
/JS/		US- 5,148,154	09-15-1992	MacKay et al.	
7JS7		US- 5,200,825	04-06-1993	Perine	
/JS/		US- 5,222,924	06-29-1993	Shin et al.	
JS/		US- 5,333,091	07-26-1994	lggulden et al.	
/JS/		US- 5,339,393	08-16-1994	Duffy et al.	
7JS/		US- 5,381,477	01-10-1995	Beyers, II et al.	
/JS/		US- 5,424,770	06-13-1995	Schmelzer et al.	
/JS/		US- 5,452,016	09-19-1995	Ohara et al.	
/JS/		US- 5,521,841	05-28-1996	Arman et al.	
7J\$/		US- 5,635,982	06-03-1997	Zhang et al.	
JJS/		US- 5,654,769	08-05-1997	Ohara et al.	***************************************
JS/		US- 5,664,227	09-02-1997	Mauldin et al.	***************************************
JJS/		US- 5,675,752	10-07-1997	Scott et al.	-
/JS/		US- 5,694,163	12-02-1997	Harrison	
<i>-'\</i> )\$/		US- 5,696,965	12-09-1997	Dedrick	
/JS/		US- 5,764,916	06-09-1998	Busey et al.	
/JS/		US- 5,778,108	07-07-1998	Coleman Jr.	<u> </u>
7JS/		US- 5,781,188	07-14-1998	Amiot et al.	
<i>T</i> JS/		US- 5,805,733	09-08-1998	Wang et al.	<del></del>
7JS/		US- 5,821,945	10-13-1998	Yeo et al.	
/JS/		US- 5,828,809	10-27-1998	Chang et al.	
/19/		US- 5,828,839	10-27-1998	Moncreiff	
<i>''</i> ']\$/		US- 5,875,107	02-23-1999	Nagai et al.	
S/		US- 5,877,821	03-02-1999	Newlin et al.	
<del>3</del> /JS/		US- 5,920,300	07-06-1999	Yamazaki et al.	
7.187		US- 5,920,360	07-06-1999	Coleman Jr.	
7,187		US- 5,923,365	07-13-1999	Tamir et al.	· · · · · · · · · · · · · · · · · · ·
JS/		US- 5,933,811	08-03-1999	Angles et al.	
JS/		US- 5,959,681	09-28-1999	Cho	
118		US- 5,959,697	09-28-1999	Coleman Jr.	
JS/		US- 5,969,755	10-19-1999	Courtney	
<del>/JS/</del>		US- 5,990,980	11-23-1999	Golin	
7JS/		US- 5,995,095	11-30-1999	Ratakonda	
/JS		US- 6,005,565	12-21-1999	Legali et al.	
/JS/		US- 6,005,597	12-21-1999	Barrett et al.	
JS/		US- 6,014,183	01-11-2000	Hoang	
<i>'ijsi</i>		US- 6,041,323	03-21-2000	Kubota	

/JS/		US- 6,055,018	04-25-2000	Swan	
1001	/JS/	US- 6,060,167	05-09-2000	Morgan et al.	<del> </del>
7101	\JQ[_			<del></del>	
/JS/	-,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	US- 6,078,917	06-20-2000	Paulsen Jr. et al.	
	_/JS/_	US- 6,100,941	08-08-2000	Dimitrova et al.	
/JS/		US- 6,115,709	09-05-2000	Gilmour et al.	
	JJS/	US- 6,122,657	09-19-2000	Hoffman Jr. et al.	
7JS/		US- 6,141,041	10-31-2000	Carlborn et al.	
	7JS7	US- 6,141,060	10-31-2000	Honey et al.	
/JS/	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	US- 6,144,375	11-07-2000	Jain et al.	
100/	/JS/	US- 6,161,142	12-12-2000	Wolfe et al.	<u> </u>
/JS/	-,00,	US- 6,169,542	01-02-2001	Hooks et al.	
7001				Hendricks et al.	
7107	/JS/	US- 6,181,335	01-30-2001		
/JS/		US- 6,195,497	02-27-2001	Nagasaka et al.	
	/JS/	US- 6,199,076	03-06-2001	Logan et al.	
/JS/		' US- 6,212,527	04-03-2001	Gustman	
	/JS/	US- 6,216,129	04-10-2001	Eldering	
/JS/		US- 6,219,837	04-17-2001	Yeo et al.	
	/JS/	US- 6,230,172	05-08-2001	Pumaveja et al.	
/JS/	1991	US- 6,233,389	05-15-2001	Barton et al.	····-
1001	/10/	US- 6,233,586	05-15-2001	Chang et al.	
1101	/JS/			Tannen	<del></del>
/JS/	L	US- 6,240,406	05-29-2001		
	/JS/	US- 6,252,444	06-26-2001	Hoffberg	
/JS/		US- 6,275,268	08-14-2001	Ellis et al.	
	/.IS/	US- 6,286,140	09-04-2001	Ivanyi	
/JS/		US- 6,304,665	10-16-2001	Cavallaro et al.	
-/	/JS/	US- 6,311,189	10-30-2001	DeVries et al.	
/JS/		US- 6,320,624	11-20-2001	Ayer et al.	
. /00/	/JS/	US- 6,339,842	01-15-2002	Fernandez et al.	
/JS/	IJOI	US- 6,342,904	01-29-02	Vasudevan et al.	<del> </del>
1001	/JS/	US- 6,363,160	03-26-2002	Bradski et al.	-
7101	1331				<del></del>
/JS/	/10/	US- 6,418,168	07-09-2002	Narita	
	/JS/	US- 6,421,680	07-16-2002	Kumhyr et al.	
/JS/		US- 6,425,133	07-23-2002	Leary	
	/JS/	US- 6,438,579	08-20-2002	Hosken	t
/JS/		US- 6,439,572	08-27-2002	Bowen	
	/JS/	US- 6,498,783	12-24-2002	Lin	· · · · · · · · · · · · · · · · · · ·
/JS/	7007	US- 6,549,643	04-15-2003	Toklu et al.	
		US- 6,556,767	04-29-2003	Okayama et al.	
/10/	-/JS/	US- 6,597,859	07-22-2003	Leinhart et al.	<del> </del>
/JS/	1101				· · · · · · · · · · · · · · · · · · ·
	/JS/_	US- 6,614,987	09-02-2003	Ismail et al.	
/JS/_	,,,,,	US- 6,658,095	12-02-2003	Yoakum et al.	
	/JS/	US- 6,665,423	12-16-2003	Mehrotra et al.	
/JS/		US- 6,678,635	01-13-2004	Tovinkere et al.	
	/JS/	US- 6,681,395	01-20-2004	Nishi	
/JS/	, vvv	US- 6,691,126	02-10-2004	Syeda-Mahmood	
1001	<i>1</i> JS/	US- 6,697,523	02-24-2004	Divakaran et al.	
/JS/	· • • · ·	US- 6,704,929	03-09-2004	Ozer et al.	
1001	/JS/	US- 6,724,933	04-20-2004	Lin et al.	<del>                                     </del>
	,50,			<del></del>	<del> </del>
_/JS/	7100	US- 6,754,904	06-22-2004	Cooper et al.	<u> </u>
	/JS/	US- 6,774,917	08-10-2004	Foote et al.	ļ
/JS/_		US- 6,820,278	11-16-2004	Ellis	
	LISL	US- 6,829,781	12-07-2004	Bhagavath et al.	
/JS/		US- 6,880,171	04-12-2005	Ahmad et al.	
	/.IS/	US- 6,925,455	08-02-2005	Gong et al.	T
/10/	///	US- 6,931,595	08-16-2005	Pan et al.	1
_/JS/_	7JS/	US- 6,970,510	11-29-2005	Wee et al.	
/10/	, 50,	US- 6,981,129	12-27-2005	Boggs et al.	
_/.IS/	7107				
1101	738/	US- 6,993,245	01-31-2006	Harville	<u> </u>
_/JS/		US- 2002/0013943	01-31-2002	Haberman et al.	<b>1</b>
	/JS/	US- 2002/0018594	02-14-2002	Xu et al.	<u> </u>
/JS/		US- 2002/0079165	06-27-2002	Wolfe	<b></b>
	_/JS/	US- 2002/0080162	06-27-2002	Pan et al.	
/JS/_		US- 2002/0083473	06-27-2002	Agnihotri et al.	

,

/JS/		US- 2002/0141619	10-03-2002	Standridge et al.	
	/JS/	US- 2002/0156909	10-24-2002	Harrington	
/JS/		US- 2002/0178135	11-28-2002	Tanaka	
	/JS/	US- 2002/0184220	12-05-2002	Teraguchi et al.	
/JS/		US- 2002/0190991	12-19-2002	Efran et al.	
	/JS/	US- 2002/0194589	12-19-2002	Cristofalo et al.	
/JS/		US- 2003/0001880	01-02-2003	Holtz et al.	
	7JS/	US- 2003/0007555	01-09-2003	Divakaran et al.	
JS/		US- 2003/0026592	02-06-2003	Kawahara et al.	
	/JS/	US- 2003/0072440	04-17-2003	Murray et al.	
<i>1</i> JS/		US- 2003/0081937	05-01-2003	u	
	/JS/	US- 2003/0182663	09-25-2003	Gudorf et al.	
/JS/		US- 2003/0187650	10-02-2003	Moore et al.	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	/JS/	US- 2003/0229900	12-11-2003	Reisman	
/JS/		US- 2004/0003041	01-01-2004	Moore et al.	
	/JS/	US- 2004/0015569	01-22-2004	Lonnfors et al.	
/JS/		US- 2004/0017389	01-29-2004	Pan et al.	
	/JS/	US- 2004/0030750	02-12-2004	Moore et al.	
JS/	1	US- 2004/0032486	02-19-2004	Shusman	
	/JS/	US- 2004/0088289	05-06-2004	Xu et al.	
/JS/	1 ////	US- 2004/0098754	05-20-2004	Vella et al.	
1000	/JS/	US- 2004/0125124	07-01-2004	Kim et al.	
/JS/	1	US- 2004/0125877	07-01-2004	Chang et al.	
,,,,,,,,	/JS/	US- 2004/0197088	10-07-2004	Ferman et al.	
/JS/	1	US- 2004/0227768	11-18-2004	Bates et al.	
	/JS/	US- 2004/0231003	11-18-2004	Cooper et al.	

.

٠

FOREIGN PATENT DOCUMENTS						
		Foreign Patent Document	Publication	Name of Patentee or	Pages, Columns, Lines,	
Examiner I	Cite No. <sup>1</sup>	Country Code <sup>3</sup> - Number <sup>4</sup> - Kind Code <sup>5</sup> (if known)	Date MM-DD- YYYY	Applicant of Cited Document	Where Relevant Passages or Relevant Figures Appear	т⁵
/JS/		EP 1250807	10-23-2002	Kirsh et al.		
/JS/		WO 01/50753	07-12-2001	Silva et al.		

		NON PATENT LITERATURE DOCUMENTS	
Examiner Initials *	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
/JS/		MICHAEL G. CHRISTEL, ALEXANDER G. HAUPTMANN, ADRIENNE S. WARMACK, SCOTT A. CROSBY,  "Adjustable Filmstrips and Skims as Abstractions for a Digital Video Library," Computer Science Department,  Camegie Mellon University, Pittsburgh, PA 15213 USA.	
/JS/		PENG XU, et al., "Algorithms and System for High-Level Structure Analysis and Event Detection in Soccer Video," Columbia University, ADVENT – Technical Report #111, June 2001.	
/JS/		KEITH MILLAR AND DAVID WHITE, "A Schema for TV-Anytime: Segmentation Metadata AN195," NDS Contribution from MyTV, NDS Limited 2000, 27 pages.	
/JS/		KEITH MILLAR et al., "A Schema for TV-Anytime Segmentation Metadata AN195rl myTV project," NDS Systems Division, NDS Limited 2000, 28 pages.	
/JS/		S.E. LEVINSON, L. R. RABINER, and M. M. SONDHI, "An Introduction to the Application of the Theory of Probabilistic Functions of a Markov Process to Automatic Speech Recognition," Copyright 1983 American Telephone and Telegraph company, The Bell system Technical Journal, Vol. 62, No. 4, April 1983, pp. 1035-1074.	
/JS/		DENNIS YOW, et al., "Analysis and Presentation of Soccer Highlights from Digital Video," To appear in the Proceedings, Second Asian Conference on Computer Vision (ACCV '95).	

DREW D. SAUR, et al. "Automated Analysis and Annotation of Basketball Video," SPIE Vol. 3022, pp. 176-187, 1997.	
HAO PAN, et al., "Automatic Detection of Replay Segments in Broadcast Sports Programs by Detection of Logos in Scene Transitions," 2002 IEEE, pp. IV-3385 – IV-3388.	
YIHONG GONG, et al., "Automatic Parsing of TV soccer Programs," 1995 IEEE, pp. 167 – 174.	
JONATHAN D. COURTNEY, "Automatic Video Indexing via Object Motion Analysis," Pattern Recognition, Vol. 30, No. 4, pp. 607-625, 1997.	
YONG RUI, et al. "Automatically Extracting Highlights for TV Baseball Programs," ACM Multimedia 2000 Los Angeles, CA, USA, pp. 105-115.	<u> </u>
NUNO VASCONCELOS AND ANDREW LIPPMAN, "Bayesian Modeling of Video Editing and Structure: Semantic Features for Video Summarization and Browsing," 1998 IEEE, pp. 153 – 157.	
PADHRAIC SMYTH, "Belief Networks, Hidden Markov Models, and Markov Random Fields: a Unifying View," To appear in Pattern Recognition Letters, 1998, Information and Computer Science Department, University of California Irvine, CA 92697-3425, March 20, 1998	_
FRANCIS C. LI et al., "Browsing Digital Video," CHI 2000 April 1-6, 2000, CHI Letters volume 2 issue 1, pp. 169- 176.	
T. LAMBROU, et al., "Classification of Audio Signals Using Statistical Features on Time and Wavelet Transform Domains," 1998 IEEE, pp. 3621 – 3624.	_
JOSHUA ALSPECTOR,et al., "Comparing Feature-based and Clique-based User Models for Movie Selection," Digital Libraries 98, Pittsburgh, PA, Copyright ACM 1998, pp. 11 – 18.	
RAINER LIENHART, "Comparison of Automatic Shot Boundary Detection Algorithms," Part of the IS&T/SPIE conference on Storage and Retrieval for Image and Video Databases VII, San Jose, CA, January 1999, SPIE Vol. 3656 pp. 290 – 301	
JOHN CANNY, "A Computational Approach to Edge Detection," IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol. PAMI-8, No. 6, November 1986, IEEE 1986, pp. 679 – 698.	
RICHARD QIAN et al., "A Computational Approach to Semantic Event Detection," 1999 IEEE, pp. 200 – 206.	<del></del>
F. ARMAN, et al., "Content-based Browsing of Video Sequences," to appear in the Proceedings of ACM International Conference on Multimedia '94, October 15-20, San Francisco, CA, 7 pages.	
HONGJIANG ZHANG, et al. "Content-Based Video Browsing Tools," SPIE Vol. 2417, 1995, pp. 389 – 398.	
STEPHEN W. SMOLIAR, et al. "Content-Based Video Indexing and Retrieval," 1994 IEEE, pp. 62 – 72.	
STEFAN EICKELER, et al., "Content-based Video Indexing of TV Broadcast News Using Hidden Markov Models," Proceedings of IEEE International Conference on Acoustics, Speech, and Signal Processing, Phoenix, AZ, 1999, 4 nages	
JANE HUNTER (DSTC Pty Ltd), Editor, "DDL Working Draft 3.0," ISO/IEC JTC1/SC29/WG11 N3391, MPEG 00/ May 2000 (Geneva), 23 pages.	
VIKRANT KOBLA, et al. "Detection of Slow-Motion Replay Sequences for Identifying Sports Videos," Laboratory for Language and Media Processing, University of Maryland, College Park, MD 20742-3275, USA, 6 pages.	
ZHU LIU and QIAN HUANG, "Detecting News Reporting Using Audio/Visual Information," 1999 IEEE, pp. 324 – 328.	
Y KAWAI, "Detection of Replay Scenes in Broadcasted Sports Video by focusing on digital Video Effects," IEICE (D-II), Vol. J84-D-II, No. 2, pp. 432-435, February 2001, (In Japanese), pp. 432 – 437.	
VIKRANT KOBLA, et al., "Detection of Slow-Motion Replay Sequences for Identifying Sports Videos," Laboratory for Language and Media Processing, University of Maryland, College Park, MD 20742-3275, USA, pp. 135-140.	
H. PAN, et al. "Detection of Slow-Motion Replay Segments in sports Video for Highlights Generation," Proceedings of IEEE International Conference on Acoustics, Speech, and signal Processing, Salt Lake City, UT, 2001, 4 pages	
ALAN E BELL, "The dynamic digital disk," IEEE Spectrum, October 1999, pp. 28-35.	
BAOXIN LI and M. IBRAHIM SEZAN, "Event Detection and Summarization in Sports Video," Sharp Laboratories of America, 5750 NW Pacific Rim Blvd., Camas, WA 98607, USA, 5 pages.	-
MINERVA YEUNG, "Extracting Story Units from Long Programs for Video Browsing and Navigation," Proceedings of MULTIMEDIA 1996, 1996 IEEE, pp. 296 – 304.	
BOON-LOCK YEO et al., "On the Extraction of DC Sequence from MPEG Compressed Video," 1995 IEEE, pp. 260 – 263.	
	HAD PAN, et al., "Automatic Detection of Replay Segments in Broadcast Sports Programs by Detection of Logos in Scane Transitions," 2002 IEEE, pp. IV-3385 – IV-3388.  YIHONG GONG, et al., "Automatic Parsing of TV soccer Programs," 1995 IEEE, pp. 167 – 174.  JONATHAN D. COURTNEY, "Automatic Video Indexing via Object Motion Analysis," Pattern Recognition, Vol. 30, No. 4, pp. 807-425, 1997.  YONG RUI, et al. "Automatically Extractling Highlights for TV Baseball Programs," ACM Multimedia 2000 Los Arrigeles, CA USA, pp. 105-115.  NUNO VASCONCELOS AND ANDREW UPPMAN, "Bayesian Modeling of Video Editing and Structure: Semantic Features for Video Summarization and Borwsing," 1998 IEEE, pp. 153 – 157.  PADHRAIC SMYTH, "Belief Networks, Hidden Markov Models, and Markov Random Fields: a Unifying View," To appear in Pattern Recognition Letters, 1998, Information and Computer Science Department, University of California, Invino, CA 92967-3425, March 20, 1998.  FRANCIS C. I et al., "Browsing Objetal Video," CHI 2000 April 1-6, 2000, CHI Letters volume 2 issue 1, pp. 169-176.  T. AMBROU, et al., "Classification of Audio Signals Using Statistical Features on Time and Wavelal Transform Domains," 1999 IEEE, pp. 3921 – 3024.  JOSHIJA ALSPECTOR, et al., "Comparing Feature-based and Clique-based User Models for Movie Selection," Objetal Libraries 99, Fritsburgh, PA, Copyright ACM 1998, pp. 11 – 18.  RAINER LIENHART, "Comparison of Audionatic Shot Boundary Detection Algorithms," Part of the IS&T/SPIE conference on Storage and Retrieval for Image and Video Databases VII, San Jose, CA, January 1999, SPIE Vol. 3659, pp. 260 – 301.  JOHN CANNY, "A Computational Approach to Edge Detection," IEEE Transactions on Pattern Analysis and Machine Intelligence, Vol PAMIA, No. 6, November 1986, IEEE 1986, pp. 679 – 698.  RICHARD QIAN et al., "Content-Based Video Indexing of TV Breadcast New Using Hidden Markov Models, Proceedings of IEEE International Conference on Acoustics, Speech, and Signal Processing, Phomis, AZ, 1999, Apages.  STEPHEN W. SMOL

/JS/	FAP Specifications, MPEG-4 Compliant Facial Animation, http://www.dsp.dist.unige.it/~pok/RESEARCH/MPEG/fapspec.htm, 4 pages.	
/JS/	FRANK R. KSCHISCHANG, et al., "Factor Graphs and the Sum-Product Algorithm," IEEE Transactions on Information Theory, vol. 47, No. 2, February 2001, pp. 498 – 519.	
/JS/	JOHN S. BORECZKY, et al. "A Hidden Markov Model Framework for Video Segmentation Using Audio and Image Features," Proceedings of IEEE International Conference on Acoustics, Speech, and Signal Processing, Seattle, WA, 1998, 4 pages.	
/JS/	WAYNE WOLF, "Hidden Markov Model Parsing of Video Programs," Proceedings of the 1997 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP '97), pp. 2609-2611.	
/JS/	BILGE GUNSEL, et al., "Hierarchical Temporal video Segmentation and content Characterization," Dept. of Electrical Engineering and Center for Electronic Imaging Systems, University of Rochester, Rochester, NY 14627, SPIE Vol. 3229, 1997.	-
/JS/	M. R. NAPHADE, et al. "A High-Performance Shot Boundary Detection Algorithm Using Multiple Cues," Proceedings of IEEE International Conference on Image Processing, Chicago, IL, 1998, pp. 884 – 887.	
/JS/	JOSH BERNOFF, "How Cable TV Can Beat Satellite," WholeView TechStrategy Rsearch, April 2002 Forrester Research, Inc., 400 Technology Square, Cambridge, MA 02139 USA	
/JS/	VIKRANT KOBLA, et al., "identifying sports videos using replay, text, and camera motion features," Laboratory for Language and Media Processing, University of Maryland, College Park, MD 20742-3275, USA, Date Unknown.	
/JS/	B. B. CHAUDHURI, et al., "Improved fractal geometry based texture segmentation technique," IEE Proceedings-E, Vol. 140, No. 5, September 1993, pp. 233 – 241.	
/JS/	TOSHIO KAWASHIMA, et al., "Indexing of Baseball Telecast for Content-based Video Retrieval," Dept. of Information engineering, Hokkaido University, Kita-13, Nishi-8, Sapporo, 060-8628, Japan, 1998 IEEE, pp. 871 – 874.	
/JS/	NATHANIEL J. THURSTON, et al. "Intelligent Audience guidance: The New Paradigm in Television Navigation," Predictive Networks, Inc., February 21, 2002, 9 pages.	
/JS/	DULCE PONCELEON, et al. "Key to Effective Video Retrieval: Effective Cataloging and Browsing," ACM Multimedia '98, Bristol, UK, 1998, pp. 99 – 107.	
/JS/	NOBORU BABAGUCHI, et al., "Linking Live and Replay Scenes in Broadcasted Sports Video," ACM Multimedia Workshop, Marina Del Rey, CA, USA, Copyright ACM 2000, pp. 205 – 208.	
/JS/	GIRIDHARAN IYENGAR, et al., "Models for automatic classification of video sequences," SPIE Vol. 3312, 1997, pp. 216 – 227.	
/JS/	NEVENKA DIMITROVA, et al., "Motion Recovery for Video Content Classification," ACM Transactions on Information Systems, Vol. 13, No. 4, October 1995, pp. 408-439.	
/JS/	PETER VAN BEEK, et al, Editors, "MPEG-7 Multimedia Description Schemes WD (Version 3.0)," ISO/IEC JTC 1/SC 29/WG 11/N3411, May 2000, Geneva.	
/JS/	PETER VAN BEEK, et al., Editors, "MPEG-7 Multimedia Description Schemes XM (Version 3.0)," ISO/IEC JTC 1/SC29/WG 11/N3410, May 2000, Geneva.	
/JS/	SYLVIE JEANNIN, et al., Editors, "MPEG-7 Visual part of eXperimentation Model Version 6.0," ISO/IEC JTC1/SC29/WG11/N3398, Geneva, June 2000.	
/JS/	KAUSHAL KURAPATI, et al., "A Multi-Agent TV Recommender," Adaptive Systems Department, Philips Research Briarcliff, 345 Scarborough Rd., Briarcliff Manor, NY 10510, USA, Date Unknown.	
/JS/	JANE HUNTER (DSTC Pty Ltd.), "Text of ISO/IEC CD 15938-2 Information technology – Multimedia content description interface – Part 2 Description definition language," ISO/IEC JTC1/SC29/WG11 N3702, MPEG 00/3702, October 2000 (La Baule).	
/JS/	"Information Technology – Multimedia Content Description Interface – Part 5: Multimedia Description Schemes," ISO/IEC JTC 1/SC 29 N 3705, November 17, 2000, ISO/IEC CD 15938-5.	
/JS/	PETER VAN BEEK, et al., "Text of 15938-5 FCD Information Technology – Multimedia Content Description Interface – Part 5 Multimedia Description Schemes," ISO/IEC JTC 1/SC 29 N3966 March 12, 2001, 500 pages.	•
/JS/	YAO WANG, et al., "Multimedia Content Analysis," IEEE Signal Processing Magazine, November 2000, pp. 12-35.	
/JS/	MARK T. MAYBURY, et al., "Multimedia Summaries of Broadcast News," Advanced Information Systems Center, The MITRE Corporation, 202 Burlington Road, Bedford, MA 01730, USA, pp. 442 – 449.	•
/JS/	SHINICHI SATOH, et al., "Name-It: Association of Face and Name in Video," School of Computer Science, Camegie Mellon University, Pittsburgh, PA 15213, December 20, 1996, 19 pages.	
/JS/	STUART J. GOLIN, "New metric to detect wipes and other gradual transitions in" Part of the IS&T/SPIE Conference on Visual communications and Image Processing '99, San Jose, CA January 1999, SPIE Vol. 3653, pp. 1464 – 1474.	
/JS/	ULLAS GARGI, et al., "Transactions Letters: Performance Characterization of Video-Shot-Change Detection Methods," IEEE Transactions on Circuits and Systems for Video Technology, Vol. 10, No. 1, February 2000, 13 pages.	

/JS/	MARC LIGHT, et al., "Personalized Multimedia Information Access," Communications of the ACM, Vol. 45, No. 5, May 2002, pp. 54 – 59.
/JS/	MICHAEL T. CHAN, et al., "Real-Time Lip Tracking and Bimodal Continuous Speech Recognition," Rockwell Science Center, 1049 Camino Dos Rios, Thousand Oaks, CA 91360, 6 pages, date unknown.
/JS/	BOON-LOCK YEO, et al., "Retrieving and Visualizing Video," Communications of the ACM, December 1997, Vol. 40, No. 12, pp. 43 – 52.
/JS/	H.B. LU, et al., "Robust Gradual Scene Change Detection," Proceedings of IEEE International Conference on Image Processing, Kobe, Japan, 1999, 5 pages.
/JS/	RICHARD J. QIAN et al., "A Robust Real-Time Face Tracking Algorithm," sharp Laboratories of America, 5750 N.W. Pacific Rim Blvd., Camas, WA 98607, 1998 IEEE, pp. 131-135.
/JS/	LEXING LIE, "Segmentation and Event Detection in Soccer Audio," EE 6820 Project, Soccer Audio, May 15, 2001, 9 pages.
/JS/	RICCARDO LEONARDI, et al., "Content-Based Multimedia Indexing and Retrieval: Semantic Indexing of Multimedia Documents," IEEE 2002, pp. 44 – 51.
/JS/	R. W. PICARD, "A Society of Models for Video and Image Libraries," IBM Systems Journal, Vol. 35, Nos. 3 & 4, 1996, pp. 292 – 312.
/JS/	ALBERTO DEL BIMBO, et al., "A Spatial Logic for Symbolic Description of Image Contents," Journal of Visual Languages and Computing (1994) 5, pp. 267-286.
/JS/	LEXING XIE, et al., "Structure Analysis of Soccer Video with Hidden Markov Models," Department of Electrical Engineering, Columbia University, New York, NY, 4 pages.
/JS/	SELIM AKSOY, et al., "Textural Features for Image Database Retrieval," Intelligent Systems Laboratory, Department of Electrical Engineering, University of Washington, Seattle, WA 98195-2500, 5 pages.
/JS/	B. S. MANJUNATH, et al., "Texture Features for Browsing and Retrieval of Image Data," IEEE Transactions on Pattern Analysis and Machine Intelligence, vol. 18, No. 8, August 1996, pp. 837 – 842.
/JS/	RICHARD W. CONNERS, et al., "A Theoretical comparison of Texture Algorithms," IEEE Transactions on Pattern Analysis and Machine Intelligence, vol., PAMI-2, No. 3, May 1980, pp. 204 – 222.
/JS/	NOBORU BABAGUCHI, "Towards Abstracting Sports Video by Highlights," ISIR, Osaka University, Ibaraki, Osaka 567-0047, Japan, 2000 IEEE, pp. 1519 – 1522.
/JS/	STEPHEN S. INTILLE, "Tracking Using a Local Closed-World Assumption: Tracking in the Football Domain," MIT Media Lab Perceptual computing group Technical Report No. 296, pp. 1-62
/JS/	LAWRENCE R. RABINER, "A Tutorial on Hidden Markov Models and Selected Applications in Speech Recognition," Proceedings of the IEEE, Vol. 77, No. 2, February 1989, pp. 257 – 286.
/JS/	JIM STROUD, 'TV Personalization: A Key Component of Interactive TV," The Carmel Group, 2001, 9 pages.
/JS/	RICHARD O. DUDA et al, "Use of the Hough Transformation To Detect Lines and Curves in Pictures," Communications of the ACM, January 1972, Volume 15, Number 1, pp. 11-15.
· /JS/	*User Preference Descriptions for MPEG-7,* ISO/IEC JTC1/SC29/WG11, MPEG 99/MXXXX, Maul, Hawaii, December 1999, pp. 1-18.
/JS/	RAINER LIENHART, et al., "Video Abstracting," Communications of the ACM, December 1997/ Vol. 40, No. 12, pp. 55 – 62.
/JS/	SHINGO UCHIHASHI, et al., "Video Manga: Generating Semantically Meaningful Video Summaries,"FX Palo Alto Laboratory, 3400 Hillview Avenue, Palo Alto, CA 94304, USA, pp. 383 – 392.
/JS/	MICHAEL A. SMITH, et al., "Video Skimming for Quick Browsing based on Audio and Image Characterization," School of Computer Science, Carnegle Mellon University, Pittsburgh, PA 15213, July 30, 1995, 24 pages.
/JS/	DANIEL DEMENTHON, et al., "Video summarization by Curve Simplification," Language and Media Processing (LAMP), University of Maryland, College Park, MD 20742-3275, 1998 ACM, pp. 211 – 218.
/JS/	CHUNG-LIN HUANG, et al., "Video summarization using Hidden Markov Model," Electrical Engineering Department, National Tsing-Hua University, Hsin-Chu, Taiwan, ROC, 2001 IEEE, pp. 473 – 477.
/JS/	KEN MASUMITSU, et al., "Video Summarization Using Reinforcement Learning in Eigenspace," IBM Research, Tokyo Research Laboratory, 1623-14, Shimotsuruma, Yamato-shi, Kanagawa, Japan, 4 pages.
/JS/	YIHONG GONG, et al., "Video Summarization Using Singular Value Decomposition," C&C Research laboratories, NEc USA, Inc. 110 Rio Robles, San Jose, CA 95134, USA, 2000 IEEE, 7 pages.
· /JS/	YIHONG GONG, et al., "Video Summarization with Minimal Visual Content Redundancies," C&C Research

.

/JS/	MINERVA M. YEUNG, et al., "Video visualization for Compact Presentation and Fast Browsing of Pictorial Content," IEEE Transactions on circuits and Systems for Video Technology, vol. 7, No. 5, October 1997, pp. 771 – 785.	
/JS/	STEPHEN S. INTILLE, et al., "Visual Tracking Using closed-Worlds,", MIT Media Laboratory Perceptual computing Section Technical Report No. 294, November 1994, pp. 1 – 18.	
/JS/_	LESZEK CIEPLINSKI, et al. "Visual Working Draft 3.0," ISO/IEC JTC1/SC29/WG11/N3399, June 2000 (Geneva), 92 pages.	
/JS/	SUNGHOON CHOI, et al., "Where are the ball and players?: Soccer Game Analysis with Color-based Tracking and Image Mosaick," Dept. of EE, Pohang University of Science and Technology, San 31 Hyoja Dong, Pohang, 790-784, Republic of Korea, pp. 1-15.	
/JS/	http://web.archive.org/web/20001017172449/http://www.pvi-inc.com/	

Examiner Signature	/Justin Shepard/ (06/18/2007)	Date Considered	-	
-----------------------	-------------------------------	--------------------	---	--

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance

\*\*EXAMINER: Initial if reference considered, whether or not classion is in conformance with MPEP 609. Drawline through classon in not in conformance and not considered. Include copy of this form with next communication to applicant.

\*Applicant's unique citation designation number (optional). \*Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.